

WE CLAIM

1. A method for determining a substance which regulates glycation of a protein, comprising admixing (i) a substance to be tested, (ii) a histone H1, and (iii) ADP-ribose, and determining of said substance to be tested has an effect on glycation of histone H1 by ADP-ribose, wherein indication of an effect on said glycation indicates that said substance regulates glycation.
2. The method of claim 1, wherein said substance is a dicarbonyl scavenger.
3. The method of claim 1, wherein said substance is not an antioxidant.
4. The method claim 1, comprising determining glycation by measuring fluorescence of glycated histone H1.
5. The method of claim 1, further comprising comparing said effect to the effect achieved by admixing aminoguanidine, histone H1, and ADP-ribose.
6. The method claim 2, comprising measuring fluorescence about 5 days after admixing (i), (ii), and (iii)
7. The method of claim 1, further comprising combining admixing (i), (ii) and (iii) in a separate assay with AGE-BSA and measuring effect of (i) on fluorescence of AGE-BSA.
8. The method of claim 1, further comprising determining cross-linking of molecules of histone H1.
9. The method of claim 1, wherein said substance is a nucleophilic compound.
10. The method of claim 7, wherein said nucleophilic compound is a thiol containing compound.
11. A kit useful in determining if a substance is capable of regulating protein glycation, comprising a container means, and separate portions of each of (i) histone H1 and (ii) ADP-ribose.

